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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/914,718	01/24/2002	Isao Karube	082369-000000US	2726

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EXAMINER

BARTON, JEFFREY THOMAS

ART UNIT PAPER NUMBER

1753

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/914,718

Applicant(s)

KARUBE, ISAO

Examiner

Jeffrey T. Barton

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 March 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 20020325
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. 35 U.S.C. 112, first paragraph, requires the specification to be written in "full, clear, concise, and exact terms." The specification is replete with terms which are not clear, concise and exact. The specification should be revised carefully in order to comply with 35 U.S.C. 112, first paragraph. Examples of some unclear, inexact or verbose terms used in the specification are: "attempt for performing electrophoresis" (Page 11, line 31), "obstacles of heat radiation by stacking a plurality . . ." (Page 13, lines 30-31)
2. Claims 1-8 are objected to because of the following informalities: all claims include the limitation " . . . separation medium composed of a plurality of separation media . . ." which is confusing because it defines a singular medium as including plural media. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 3-5, 7, and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Anderson et al.

Regarding claims 1 and 8, Anderson et al disclose a method of two-dimensional separation using a second-dimension medium composed of a plurality of independent separation media. (Column 8, lines 49-65; distinct stacking gel or other zones within the second dimension can be considered independent)

Regarding claim 3, Anderson et al disclose the analysis of proteins by their method. (Column 8, lines 19-25)

Regarding claim 4, Anderson et al disclose their method comprising electrophoretic separation. (Abstract)

Regarding claim 5, Anderson et al disclose an electrophoretic device including a means for holding a first dimension separation medium in contact with the second-dimension medium (Column 8, line 66 - Column 9, line 1); a second dimension medium composed of a plurality of separation media independent of each other (Column 8, lines 49-65); and a means for providing a driving force for the second-dimension separation (Figure 10; electrodes 94 and 128)

Regarding claim 7, Anderson et al disclose their device comprising an electric power source to provide a voltage as an electrophoretic driving force. (Figure 10; Column 23, lines 7-46)

5. Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Wiktorowicz et al.

Regarding claims 1 and 8, Wiktorowicz et al disclose a method of two-dimensional separation using a second-dimension medium composed of a plurality of independent separation media. (Figures 3-5; Column 12, line 14 - Column 13, line 25; plural channels can be considered independent)

Regarding claim 5, Wiktorowicz et al disclose an electrophoretic device including a means for holding a first dimension separation medium in contact with the second-dimension medium (Column 5, line 59 - Column 6, line 5; Column 12, lines 9-13; media are injected in contact with each other); a second dimension medium composed of a plurality of separation media independent of each other (Figure 3); and a means for providing a driving force for the second-dimension separation (Column 14, lines 38-58)

Regarding claims 2 and 6, Wiktorowicz et al disclose an electrophoretic device and method using a plurality of independent separation media filled into a plurality of physically separated spaces arranged in rows on a planar support. (Figures 3-5; Column 12, line 14 - Column 13, line 25)

Regarding claim 3, Wiktorowicz et al disclose the analysis of proteins by their method. (Column 11, lines 19-29)

Regarding claim 4, Wiktorowicz et al disclose their method comprising electrophoretic separation. (Abstract)

Regarding claim 7, Wiktorowicz et al disclose their device comprising an electric power source to provide a voltage as an electrophoretic driving force. (Column 14, lines 38-58)

6. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ledley.

Regarding claims 1 and 8, Ledley discloses a method of two-dimensional separation using a second-dimension medium composed of a plurality of independent separation media. (Figures 2 and 3; Column 3, line 60 - Column 4, line 8; plural channels can be considered independent)

Regarding claim 5, Ledley discloses an electrophoretic device including a means for holding a first dimension separation medium in contact with the second-dimension medium (Figures 1-3; Column 3, line 60 - Column 4, line 8; media are injected in contact with each other); a second dimension medium composed of a plurality of separation media independent of each other (Figures 1-3); and a means for providing a driving force for the second-dimension separation (Column 3, line 60 - Column 4, line 8)

Regarding claims 2 and 6, Ledley discloses an electrophoretic device and method using a plurality of independent separation media filled into a plurality of physically separated spaces arranged in rows on a planar support. (Figures 1-3)

Regarding claim 3, Ledley discloses the analysis of proteins by his method. (Column 3, lines 64-66)

Regarding claim 4, Ledley discloses a method comprising electrophoretic separation. (Abstract)

Regarding claim 7, Ledley discloses a device comprising an electric power source to provide a voltage as an electrophoretic driving force. (Column 3, line 60 - Column 4, line 8)

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Opplt, Baylor, and Murel disclose gels that comprise distinct and/or independent sections within one electrophoretic dimension.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Jeffrey Barton, whose telephone number is (571) 272-1307. The examiner can normally be reached Monday-Friday from 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached at (571) 272-1342. The fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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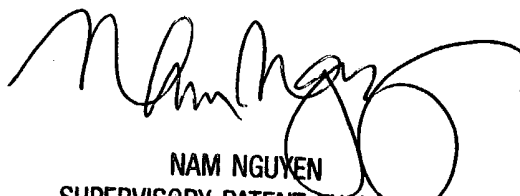
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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

JTB

November 9, 2004

A handwritten signature in black ink, appearing to read 'Nam Nguyen', is written over the printed name and title.

NAM NGUYEN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700